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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,262	11/26/2001	John W. Baker	100.362US01	1327

34206 7590 02/06/2004  
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EXAMINER

VU, PHUONG T

ART UNIT PAPER NUMBER

2841

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/995,262

Applicant(s)

BAKER, JOHN W.

Examiner

Phuong T. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-15, 17-21 and 25-28 is/are allowed.
- 6) ☒ Claim(s) 1-5, 16, 22-24, 29-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 16, 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 16, Applicant recites a secondary backplane, which necessarily implies providing a primary backplane, making the claim incomplete and indefinite. The recitation that the switch/relay permits communication between the first primary electronic module and the second primary electronic module when there is a failure within the first primary electronic module is conflicting and misdescriptive. In the event of a failure of the first primary electronic module, there would be no advantage to coupling the first primary electronic module to the second primary electronic module. It appears that the second secondary electronic module should be coupled to the second primary electronic module.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 29-36, 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Cloonan et al. (US 6,449,249 B1). Regarding claim 29, the reference discloses a telecommunications system inherently comprising a housing. The system is comprised of physical components that would need to be provided in a housing to enclose and protect the components. The system also comprises a backplane 425 which would be disposed within the housing and is adapted to receive a plurality of cards for 401, 402, 403, 410, 411 providing services to a plurality of subscribers and wherein the housing may receive a module (one of 430, 435, 440, 445, 450) to communicatively couple to one or more of the plurality of cards in the housing to add redundancy to the telecommunications system. It is noted that it has been held that the recitation that an element is "adapted to" or "for" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense.

Regarding claim 30, the module may engage a rear panel of the housing. Any panel may be considered a rear panel relative to another panel as the word "rear" is a relative directional term.

Regarding claim 31, the module (one of 435, 440, 450) includes a relay/switch and the plurality of cards include at least one primary 402 and at least one redundant card 401, the relay/switch selectively routes signals between the at least one redundant card 401 and the inputs and outputs associated with the at least one primary card 402 when the at least one primary card fails.

Regarding claim 32, the plurality of cards includes a plurality of paired primary and secondary cards, (first primary/secondary pair 402, 401 and second primary/secondary pair 411, 410) further wherein at least one of the primary cards is used as a redundant primary card as it has the same circuitry as the primary card, and a relay/switch that redirects signals between the redundant primary card and a secondary card associated with a failed primary card.

Regarding claim 33, the reference discloses a telecommunications system inherently comprising a housing. The system also comprises a backplane 425 which would be disposed in the housing and is adapted to receive a plurality of electronic modules 401, 402, 403, 410, 411 each electronic module associated with inputs and outputs for providing services to a plurality of subscribers, wherein the housing is adapted to receive an adaptation module (one of 430, 435, 440, 445, 450) to selectively communicatively couple to the plurality of electronic modules in the housing and wherein the adaptation module would be inherently received in the housing and, one of the electronic modules is designated as a back-up electronic module 401 or 410 and wherein the adaptation module selectively routes signals between the back-up electronic module and the inputs and outputs associated with a primary electronic module

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(one of 402, 403, 411) upon failure of the primary electronic module, wherein the primary electronic module is one of the plurality of electronic modules.

Regarding claim 34, the adaptation module (one of 435, 440, 450) comprises a switch.

Regarding claim 35, the plurality of electronic modules is associated with a second plurality of electronic modules (one of 430, 435, 440, 445, 450 not including the module specified as the above noted adaptation module) to provide inputs and outputs for the plurality of electronic modules.

Regarding claim 36, the reference teaches providing redundancy in a telecommunication system, the system inherently comprising a housing. The method comprising providing a housing having a plurality of electronic modules 402, 403, 411 designed to operate in a non-redundant configuration, attaching an adaptive module (comprising 410, 401 and their respective switching card), where 401 and its switching card selectively communicates with the plurality of electronic modules 402, 403 and, designating one of the modules 410 and its respective switching card as a redundant electronic module to back-up the remaining electronic modules 411 in a redundant configuration.

Regarding claim 38, the reference discloses a telecommunications system inherently comprising a housing. The system also comprises a backplane 425 inherently disposed within the housing and adapted to receive a plurality of cards 402, 403 for providing services to a plurality of subscribers and wherein the housing is adapted to receive a self-contained module 401 to plug into the housing to add redundancy to the telecommunications equipment.

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***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cloonan et al. (US 6,449,249B1) in view of Cassanova et al. (US 5,031,075). Regarding claim 1, Cloonan discloses a telecommunications system adaptive module inherently comprising a housing. The system is comprised of physical components that would need to be provided in a housing to enclose and to protect the components. The system also comprises a backplane 425 which would be disposed within the housing, an active first electronic module 402 disposed within the housing and electrically connected to the backplane, the active first electronic module electrically connectable to an active second electronic module 411 disposed within the housing for communicating with the active second electronic module, a backup first electronic module 410 disposed within the housing and electrically connected to the backplane, the backup first electronic module electrically connectable to a backup second electronic module 401 disposed within the housing for communicating with the backup second module when there is a failure within the active second electronic module and a switch/relay 445 disposed within the card cage and electrically connected to the backplane, the switch/relay adapted to enable communications between the

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enable communications between the active first electronic module and the backup second electronic module when there is a failure within the active second electronic module. Cloonan is silent about providing a housing or a housing with a card cage but, as mentioned above, a housing would be inherently required. Those skilled in the art would recognize that the most common configuration of mounting electronic modules in a housing is through use of a card cage provided in the housing for mounting the electronic components in an efficiently, orderly, and easily accessible configuration as shown in the Cassanova reference. Cassanova is relied upon solely to show a housing comprising a card cage.

Regarding claim 2, the active first electronic module necessarily comprises a plurality of connectors which mate with the backplane and may be connectable to remote equipment.

Regarding claim 3, the switch/relay comprises a plurality of circuit boards.

Regarding claim 4-5, the backplane would be attachable to a housing and disposed within the card cage.

***Allowable Subject Matter***

7. Claims 6-15, 17-21, 25-28 are allowed as it would not have been obvious to provide two backplanes wherein the first backplane, first and second electronic modules are disposed within the first module and the second module is attached to the first module, the second module comprises a second backplane, and third and fourth electronic modules are disposed in the second module in combination with the other recited elements.



***Response to Arguments***

8. Applicant's arguments filed October 31, 2003 have been fully considered. In view of Applicant's amendments to claim 31, the objection of claim 31 has been withdrawn. In view of Applicant's amendments to the claims, the previous 35 USC 112 rejections have been withdrawn. However, new 35 USC 112 rejections are made based on the amended claims. The art rejection of the claims based on the Albert reference has been withdrawn. The art rejection of the claims based on the Bagley reference has been withdrawn.

Regarding the rejection of claims 29-37 based on Cloonan, Applicant states that the claim language "wherein the housing is adapted to receive a module to communicatively couple to one or more of the plurality of cards in the housing to add redundancy to the telecommunications system" has not been met by the reference. As noted in the above rejection, Cloonan discloses modules (referenced as 430, 435, 440, 445, 450), which are switching modules. These switching modules would necessarily be provided in a housing of the system and furthermore, the switching modules are to communicatively couple with one or more of the plurality of cards 401, 402, 403, 410, 411 as required by an interpretation of the claim. Although Applicant intends for the module to be a housing module as depicted in the present application as 104, the claim does not specify what the module is or restrict the module to be a housing module. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, the claim language

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states that the module is received in the housing to communicatively couple to one or more of the plurality of cards, thus fully supporting the interpretation that the module is a switching module as referenced above. Regarding claim 38, similarly, it is noted that the switching modules are self-contained modules which are adapted to plug into the housing to add redundancy to the system as required by the claim. Therefore, regarding these claims, it is believed that the recited limitations are fully met.

Regarding the rejection of claims 1-5 based on Cloonan in view of Cassanova, Applicant argues that neither of the references teaches a "card cage attachable to the housing". From Applicant's remarks, it appears that in the use of the term "attachable" in relation to the card cage, Applicant intends to specify that said card cage is removably attachable. However, from the Examiner's perspective, a card cage attachable to the housing may be a permanently attachable part of the housing. In this case, Cassanova teaches such a configuration as the card cage is attachable and is attached permanently to the housing. As noted above, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Applicant further states that the limitation, "an active first electronic module disposed within the card cage... an active second electronic module disposed within the housing... a backup first electronic module disposed within the card cage... a backup second electronic module disposed within the housing..." has not been met. However, it is noted that in the combination presented in the above rejection, the active first electronic module, active second electronic

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module, backup first electronic module, and backup second electronic module would be disposed within the card cage. Since the card cage is provided in the outer housing, the active second electronic module and the backup second would also be disposed within the housing as specified since the card cage is provided in the housing. Applicant states that Cassanova discloses a double sided logic cage which was not disclosed as part of the present invention. The claims require a housing with a card cage and do not specify any properties or characteristics of the card cage to preclude providing a double sided card cage. As noted in the rejection, the Cassanova reference was relied upon solely to show that it is known to provide a card cage in a housing for receiving cards.

### ***Conclusion***

**9. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

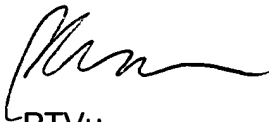
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong T. Vu whose telephone number is (571) 272-2111. The examiner can normally be reached on Mon. & Tues., 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S. Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PTVu  
Patent Examiner  
02/03/04